

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------------------------------------------------------------|---------------------|----------------------|-------------------------|------------------|
| 10/015,024 | 12/11/2001 | Scott Michael Branch | ROC920010262US1 | 6319 |
| 75 | 90 06/28/2005 | EXAMINER | | |
| CHARLES E. | | PHAN, HANH | | |
| ALLEN DYER. | , DOPPELT, MILBRATH | I & GILCHRIST | | |
| 1401 CITRUS CENTER ,255 SOUTH ORAGE AVENUE BOX 3791 ORLANDO, FL 32802-3791 | | | ART UNIT | PAPER NUMBER |
| | | | 2638 | |
| | | | DATE MAILED: 06/28/2005 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------------|--|--|--|--|
| | 10/015,024 | BRANCH ET AL. | | | | |
| Office Action Summary | Examiner '. | Art Unit | | | | |
| | Hanh Phan | 2638 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 11 De | ecember 2001. | | | | | |
| 2a) ☐ This action is FINAL . 2b) ☑ This | | | | | | |
| · | | | | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) 1-5 and 7-21 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) 1-5 and 7-19 is/are allowed. 6) Claim(s) 20 and 21 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examine | . | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) | | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Da | te | | | | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | 5) Notice of Informal P | atent Application (PTO-152) | | | | |

Page 2

'Application/Control Number: 10/015,024

Art Unit: 2638

DETAILED ACTION

1. This Office Action is responsive to the Amendment filed on 03/07/2005.

2. The indicated allowability of claims 20 and 21 is withdrawn in view of the newly discovered reference(s) to Brillhart (US patent No. 6,325,552), Choy (US Patent 6,213,806), Gallagher et al (US Patent No. 6,086,387) and Suguro et al (US Patent No. 5,362,245). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 20 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

-Claim 20 recites the limitation "the electro-optical assembly" in line 17. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2638

6. Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brillhart (US Patent No. 6,325,552) in view of Choy (US Patent No. 6,213,806).

Regarding claim 20, referring to Figure 1, Brillhart discloses a method of assembling components of an optical transceiver, the method comprising the steps of: providing a carrier (i.e., carrier 12, Fig. 1);

providing a cover (i.e., cover 32, Fig. 1) joinable together with the carrier (12) to define an enclosure therebetween;

providing an electro-optical subassembly (substantially within the enclosure and supported by the carrier, wherein the optical subassembly comprises an electro-optical unit (col. 2, lines 58-67 and col. 3, lines 1-12);

providing a coupling mechanism on one of the carrier (12, Fig. 1) and the cover (32, Fig. 1);

providing a cooperating structure on the other of the carrier and cover (col. 2, lines 58-67 and col. 3, lines 1-2).

Brillhart differ from claim 20 in that he fails to teach moving the cover to the carrier so that when the coupling mechanism is joined to the cooperating structure the cover pivots in a controlled path between opened and closed conditions about an axis remote from the transceiver whereby interference of the cover and the electro-optical subassembly is substantially eliminated. However, Choy in US Patent No. 6,213,806 teaches moving the cover (15, Fig. 4) to the carrier (13, Fig. 4) so that when the coupling mechanism is joined to the cooperating structure the cover pivots in a controlled path between opened and closed conditions about an axis remote from the

Art Unit: 2638

transceiver whereby interference of the cover and the electro-optical subassembly is substantially eliminated (col. 4, lines 15-25). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the moving the cover to the carrier so that when the coupling mechanism is joined to the cooperating structure the cover pivots in a controlled path between opened and closed conditions about an axis remote from the transceiver whereby interference of the cover and the electro-optical subassembly is substantially eliminated as taught by Choy in system of Brillhart. One of ordinary skill in the art would have been motivated to do this since Choy suggests in column 4, lines 15-25 that using such the moving the cover to the carrier so that when the coupling mechanism is joined to the cooperating structure the cover pivots in a controlled path between opened and closed conditions about an axis remote from the transceiver whereby interference of the cover and the electrooptical subassembly is substantially eliminated have advantage of allowing achieving a fast and easy access to the electro-optical assembly during inspection and/or repair of the internal circuit board and the components carried thereon without damaging them.

Regarding claim 21, the combination of Brillhart and Choy teaches the steps of providing a coupling mechanism and cooperating structure includes providing material for each that provides for EMI shielding (Fig. 1 of Brillhart and Fig. 4 of Choy).

7. Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brillhart (US Patent No. 6,325,552) in view of Gallagher et al (US Patent No. 6,086,387).

Art Unit: 2638

Regarding claim 20, referring to Figure 1, Brillhart discloses a method of assembling components of an optical transceiver, the method comprising the steps of: providing a carrier (i.e., carrier 12, Fig. 1);

providing a cover (i.e., cover 32, Fig. 1) joinable together with the carrier (12) to define an enclosure therebetween;

providing an electro-optical subassembly (substantially within the enclosure and supported by the carrier, wherein the optical subassembly comprises an electro-optical unit (col. 2, lines 58-67 and col. 3, lines 1-12);

providing a coupling mechanism on one of the carrier (12, Fig. 1) and the cover (32, Fig. 1);

providing a cooperating structure on the other of the carrier and cover (col. 2, lines 58-67 and col. 3, lines 1-2).

Brillhart differ from claim 20 in that he fails to teach moving the cover to the carrier so that when the coupling mechanism is joined to the cooperating structure the cover pivots in a controlled path between opened and closed conditions about an axis remote from the transceiver whereby interference of the cover and the electro-optical subassembly is substantially eliminated. However, Gallagher in US Patent No. 6,086,387 teaches moving the cover (40, Fig. 1) to the carrier (1, Fig. 1) so that when the coupling mechanism is joined to the cooperating structure the cover pivots in a controlled path between opened and closed conditions about an axis remote from the transceiver whereby interference of the cover and the electro-optical subassembly is substantially eliminated (col. 4, lines 38-62). Therefore, it would have been obvious to

Art Unit: 2638

one having skill in the art at the time the invention was made to incorporate the moving the cover to the carrier so that when the coupling mechanism is joined to the cooperating structure the cover pivots in a controlled path between opened and closed conditions about an axis remote from the transceiver whereby interference of the cover and the electro-optical subassembly is substantially eliminated as taught by Gallagher in system of Brillhart. One of ordinary skill in the art would have been motivated to do this since Gallagher suggests in column 4, lines 38-62 that using such the moving the cover to the carrier so that when the coupling mechanism is joined to the cooperating structure the cover pivots in a controlled path between opened and closed conditions about an axis remote from the transceiver whereby interference of the cover and the electro-optical subassembly is substantially eliminated have advantage of allowing achieving a fast and easy access to the electro-optical assembly during inspection and/or repair of the internal circuit board and the components carried thereon without damaging them.

Regarding claim 21, the combination of Brillhart and Gallagher teaches the steps of providing a coupling mechanism and cooperating structure includes providing material for each that provides for EMI shielding (Fig. 1 of Brillhart and Fig. 1 of Choy).

8. Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brillhart (US Patent No. 6,325,552) in view of Suguro et al (US Patent No. 5,362,245).

Art Unit: 2638

Regarding claim 20, referring to Figure 1, Brillhart discloses a method of assembling components of an optical transceiver, the method comprising the steps of: providing a carrier (i.e., carrier 12, Fig. 1);

providing a cover (i.e., cover 32, Fig. 1) joinable together with the carrier (12) to define an enclosure therebetween;

providing an electro-optical subassembly (substantially within the enclosure and supported by the carrier, wherein the optical subassembly comprises an electro-optical unit (col. 2, lines 58-67 and col. 3, lines 1-12);

providing a coupling mechanism on one of the carrier (12, Fig. 1) and the cover (32, Fig. 1);

providing a cooperating structure on the other of the carrier and cover (col. 2, lines 58-67 and col. 3, lines 1-2).

Brillhart differ from claim 20 in that he fails to teach moving the cover to the carrier so that when the coupling mechanism is joined to the cooperating structure the cover pivots in a controlled path between opened and closed conditions about an axis remote from the transceiver whereby interference of the cover and the electro-optical subassembly is substantially eliminated. However, Suguro in US Patent No. 5,362,245 teaches moving the cover (2, Fig. 1) to the carrier (1, Fig. 1) so that when the coupling mechanism is joined to the cooperating structure the cover pivots in a controlled path between opened and closed conditions about an axis remote from the transceiver whereby interference of the cover and the electro-optical subassembly is substantially eliminated (see Figs. 1 and 3-6, col. 1, lines 23-37 and col. 2, lines 45-63). Therefore, it

Art Unit: 2638

would have been obvious to one having skill in the art at the time the invention was made to incorporate the moving the cover to the carrier so that when the coupling mechanism is joined to the cooperating structure the cover pivots in a controlled path between opened and closed conditions about an axis remote from the transceiver whereby interference of the cover and the electro-optical subassembly is substantially eliminated as taught by Suguro in system of Brillhart. One of ordinary skill in the art would have been motivated to do this since Suguro suggests in column 1, lines 23-37 and col. 2, lines 45-63 that using such the moving the cover to the carrier so that when the coupling mechanism is joined to the cooperating structure the cover pivots in a controlled path between opened and closed conditions about an axis remote from the transceiver whereby interference of the cover and the electro-optical subassembly is substantially eliminated have advantage of allowing achieving a fast and easy access to the electro-optical assembly during inspection and/or repair of the internal circuit board and the components carried thereon without damaging them.

Regarding claim 21, the combination of Brillhart and Suguro teaches the steps of providing a coupling mechanism and cooperating structure includes providing material for each that provides for EMI shielding (Fig. 1 of Brillhart and Figs. 1 and 3 of Suguro).

Allowable Subject Matter

9. Claims 1-5 and 7-19 are allowed.

Art Unit: 2638

Response to Arguments

10. Applicant's arguments with respect to claims 1-5 and 7-21 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (571)272-3035.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye, can be reached on (571)272-3078. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

HANH PHAN PRIMARY EXAMINER



Ayproved 06/24/05

















